

CLAIMS:

1. A display unit (1) comprising:
 - a display panel (90) comprising bi-stable pixels (11); and
 - a drive unit (20,30,40,50,60) for providing during a frame period data signals to pixels (11) in an active part of the display panel (90) and for providing reference signals to pixels (11) in an inactive part of the display panel (90).
2. A display unit (1) as claimed in claim 1, wherein, in a first frame, a first part is an active part and a second part is an inactive part, and, in a second frame, the second part is an active part and the first part is an inactive part.
3. A display unit (1) as claimed in claim 1, wherein the reference signals have a voltage level situated between extreme voltage amplitudes of the data signals.
4. A display unit (1) as claimed in claim 1, wherein a part comprises a group of columns.
5. A display unit (1) as claimed in claim 4, the drive unit (20,30,40,50,60) comprising
 - data driving circuitry (30) for supplying the data signals to the pixels (11); and
 - multiplexing circuitry (50) for coupling the data driving circuitry (30) via switching elements (12) to the pixels (11) in the active part of the display panel (90) and for supplying reference signals via switching elements (12) to the pixels (11) in the inactive part of the display panel (90).
6. A display unit (1) as claimed in claim 5, wherein the multiplexing circuitry (50) is located on the display panel (90).
7. A display unit (1) as claimed in claim 1, wherein a part comprises a group of rows.

8. A display unit (1) as claimed in claim 7, the drive unit (20,30,40,50,60) comprising selection driving circuitry (40) for selecting switching elements (12) coupled to the pixels (11),
- 5 the selection driving circuitry (40) comprising shift register circuitry (60) for sequentially selecting groups of switching elements (12), wherein first groups of switching elements (12) are located in the active part of the display panel (90) and a second group of switching elements (12) is located in the inactive part of the display panel (90).
- 10 9. A display unit (1) as claimed in claim 8, wherein the first groups of switching elements (12) are rows in the active part of the display panel (90); and the second group of switching elements (12) comprises all other rows of the display panel (90) to be selected by the shift register circuitry (60) simultaneously.
- 15 10. A display unit (1) as claimed in claim 8, wherein the shift register circuitry (60) is located on the display panel (90).
11. A display unit (1) as claimed in claim 7, the drive unit (20,30,40,50,60) comprising
- 20 - selection driving circuitry (40); and
- multiplexing circuitry for coupling the selection driving circuitry (40) to switching elements (12) for sequentially selecting groups of switching elements (12), wherein first groups of switching elements (12) are located in the active part of the display panel (90) and a second group of switching elements (12) is located in the inactive part of the display panel (90).
- 25 12. A display unit (1) as claimed in claim 11, wherein the multiplexing circuitry is located on the display panel (90).
13. A display unit (1) as claimed in claim 1, the drive unit (20,30,40,50)
- 30 comprising a controller (20) which is adapted to provide:
- shaking data pulses (Sh_1, Sh_2);
 - one or more reset data pulses (R); and
 - one or more driving data pulses (Dr);
- to the pixels (11).

14. A display device comprising a display unit (1) as claimed in claim 1; and a storage medium for storing information to be displayed.

5 15. A method for driving a display unit (1) which comprises a display panel (90) comprising bi-stable pixels (11), which method comprises the step of:
- providing during a frame period data signals to pixels (11) in an active part of the display panel (90) and providing reference signals to pixels (11) in an inactive part of the display panel (90).

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16. A drive unit (20, 30, 40, 50, 60) connectable to a display panel (90) comprising bi-stable pixels (11), the drive unit (20, 30, 40, 50, 60) being adapted for providing during a frame period data signals to pixels (11) in an inactive part of the display panel (90).

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17. A processor program product for providing data signals to a display panel (90) comprising bi-stable pixels (11), the processor program product comprising the function of: providing during a frame period data signals to pixels (11) in an inactive part of the display panel (90).

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